

IN THE CLAIMS:

LISTING OF THE CLAIMS:

Claims 1-27 (cancelled)

Claim 28(new): A dental bur structure connectable to means of rotation, particularly useful for removing a dental post containing composite material from a dental canal having a wall.

comprising:

a. a rotatable shaft, said rotatable shaft including a proximal portion relative to the means of rotation, and a distal portion relative to the means of rotation;

b. a terminus located at the distal portion of said rotatable shaft, said terminus including a shoulder portion of a first cross-sectional dimension of less than said cross-sectional dimension of said shoulder portion, said tip having a smooth surface and an end for generating heat upon rotation of said shaft to melt a portion of the composite material in the dental canal in the vicinity of said tip;

c. a dentin abrading surface, said dentin abrading surface lying on said proximal portion of said rotatable shaft and being sized to remove dentin from the wall of the dental canal; and

d. means for removing composite material of said dental post upon rotation of said rotatable shaft, said means for removing composite material of said dental post being located on said rotatable shaft between said tip and said dentin abrading surface, said means for removing composite material of said dental post being sized to remove said composite material from the dental canal without removing dentin from the dental canal wall, said means for removing composite material comprising a fluted surface possessing a plurality of cutting flutes each having a rake angle of between 5 degrees and 25 degrees, said tip, said dentin abrading surface, and said means for removing composite material providing the dental canal with a substantially continuous tapered wall following removal of the composite material.

29(new): The structure of claim 28 in which said tip smooth surface further comprises an endless surface converging to a rounded end.

30(new): The structure of claim 29 in which said endless surface comprises a concave surface.

31(new): The structure of claim 28 in which said means for removing composite material further comprises means for removing elongated fibers from the matrix lying between said tip and said abrading surface.

32(new): The structure of claim 31 in which said dentin abrading surface is capable of removing dentin.

33(new): The structure of claim 28 in which said dentin

abrading surface comprises a rasp.

34(new): The structure of claim 33 in which said rasp comprises a plurality of diamond particles.

35(new): The structure of claim 28 in which said tip of said terminus is conical.

36(new): The structure of claim 28 in which said tip of said terminus is frusto-conical.

37(new): The structure of claim 28 in which said tip of said terminus is cylindrical.

38(new) The structure of claim 28 in which said dentin abrading surface comprises a knurled surface having a plurality of grits thereupon.